

REMARKS

These amendments and remarks are offered in full response to the Official Action of 24 July 2008. Applicants request reconsideration and withdrawal of all outstanding rejections, and submit that the claims are allowable for at least the reasons that follow.

Applicants cancel claims 9 and 10 without prejudice or disclaimer.

Applicants maintain claims 16 and 17, and submit new dependent claims 18-21. Maintained claims 16 and 17 are directed to pharmaceutical formulations containing specified active agents. Applicants are unaware of any prior art teaching or suggesting the use of those compounds in a pharmaceutical formulation, and/or in combination with pharmaceutically acceptable vehicles, and/or for the treatment of prion-related or neurodegenerative diseases. Accordingly, applicants submit that the claimed formulations are patentable.

Applicants have submitted new claims directed to methods of using those specific formulations for the treatment of a malady, and particularly neurodegenerative diseases. Support for the new claims is found throughout the specification, including ¶ 0058. Because those claims are directed specifically to methods requiring the use of the pharmaceutical formulations of claims 16 or 17, applicants submit that those claims are properly examined with claims 16 and 17, and the same would not constitute a serious burden on examination.

Enablement rejection

Claims 16 and 17 stand rejected under 35 U.S.C. 112, asserting a lack of enablement.

The rejection acknowledges that the elected compounds have been shown to exhibit anti-prion activity by the screens of the invention. However, the rejection asserts that the tests are *in vitro* and do not involve testing with animal models of any type of disease. The rejection concludes that the specification lacks information as to whether the elected compounds may be effective for treating.

Applicants' response is that the *in vitro* tests of the invention correlate with the claimed method; and the model is recognized within the art as correlating to the specified condition. The disclosed tests are acknowledged as showing anti-prion activity, and thus should be accepted as correlating unless the examiner has evidence to the contrary. No such evidence has been presented. As the initial burden is on the PTO to provide reasons for lack of enablement, the PTO must give reasons for a conclusion of lack of correlation for an *in vitro* example. *MPEP* § 2164.02. Applicants need not establish a rigorous or an exact invariable correlation. *Id.*

Even if there were such evidence, the evidence must be weighed for and against correlation, and it must be determined whether one skilled in the art would have accepted the tests as reasonably correlating to the condition. *Id.*

The tests and supporting data of the instant specification are sufficient and reliable indicators of a biological activity of such compounds, and are reasonably predictive that such compounds would be useful for treating prion-associated pathologies.

Submitted herewith is Tribouillard-Tanvier et al., PLoS ONE; Vol. 3, Issue 5, e2174 (2008). The reference supports applicants' assertion of anti-prion activity. The reference shows the anti-prion effect of the compound 6AP in cell-based assays

and *in vivo* in a mouse model for prion-based disease. *Id.* at pg. 2, left column (data not shown). The 6AP compound was identified by the test model of the instant application. *Id.*

The test model of the instant application also enabled identification of other compounds having *in vivo* anti-prion effect, such as Guanabenz. See Trouillard et al., PLoS ONE; Vol. 3, Issue 4, e1981 (2008). Guanabenz is active against yeast prion [*PSI*⁺] and [URE3], against a mammalian prion (*ex vivo* data), and against a murine prion (*in vivo* data). This shows that the test model disclosed and used by applicants is a sound model and a reliable indicator of an *in vivo* anti-prion effect.

The rejection further asserts that there is no disclosure directing one to specific prion related maladies, or to what constitutes a therapeutically effective amount.

Applicants' response is that the determination of a therapeutically effective amount of the claimed compounds is something well within the skill set of the ordinary worker in the art. Having been directed to anti-prion compounds and formulations by the instant specification, it would be a matter of routine for the ordinary skilled worker to determine a therapeutically effective amount. The mere prospect that such determinations might be time consuming and/or expensive does not diminish the routine nature of the determination.

Additionally, the instant specification provides ample guidance as to which prion-related diseases may be treated by the claimed pharmaceutical formulation. Such guidance is found, for example, at P. 4, left column (¶ 0059).

Double Patenting

Applicants submit that the Double Patenting rejection is mooted by the instant amendments. Applicants respectfully request reconsideration and withdrawal of the rejection.

Conclusion

In view of the foregoing amendments and remarks, applicants respectfully request reconsideration and withdrawal of all outstanding rejections. Applicants submit that the claims are now in condition for allowance, and respectfully request formal notification to that effect. If, however, the Examiner perceives any impediments to such a notice of allowability, whether substantive or formal, the Examiner is encouraged to call Applicants' attorney at the number provided below. Such informal communication will expedite examination and disposition of this case.

Respectfully submitted,

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